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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/884,219	06/19/2001	Kars-Michiel Hubert Lenssen	NL 000361	3007

7590 06/24/2002

U.S. Philips Corporation  
580 White Plains Road  
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EXAMINER

STRECKER, GERARD R

ART UNIT	PAPER NUMBER
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2862

DATE MAILED: 06/24/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
09/684,219Applicant(s)  
Lemssen et alExaminer  
G.R. STRECKERGroup Art Unit  
2862

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- ☐ Responsive to communication(s) filed on \_\_\_\_\_
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-10 is/are pending in the application.
- ☐ Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-10 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement

## Application Papers

- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☒ All ☐ Some\* ☐ None of the:
- ☒ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
- ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 7
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

Office Action Summary

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The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The abstract of the disclosure is objected to because of the use of implied language, namely, "is described" (line 2). At line 3, it is not clear what "The improvement is obtained" refers to. Correction is required. See MPEP § 608.01(b).

The disclosure is objected to because of the following informalities: headings should be provided for the various portions of the specification. At page 1, line 18, "or" is questioned. On page 7, the sentence beginning at line 14 is awkward. At the first line of Table 1, is "mm" correct?

Appropriate correction is required.

Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, it is not clear how the free and pinned layer are carried and how the free layer structurally cooperates with the pinned layer and the exchange biasing layer.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who

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has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Gill (6,219,209).

Gill discloses (Fig. 7) a magneto-resistive device comprising: a substrate (725) which carries a free (718) and a pinned (720) ferromagnetic layer, said pinned layer comprising a layer system (720) including a stack of three (750, 754, 758) ferromagnetic layers and two (752, 756) intermediate non-magnetic layers. The layer 750 is formed of Co, and layers 754 and 758 may be formed of CoFe (col. 7, lines 19-33). It would be implicit to form all three layers of CoFe as recited in claim 2. The free and pinned layers are separated by a copper spacer (col. 7, lines 34-36) as called for in claim 3. The intermediate layers 752 and 756 are formed of RU (col. 7. Lines 21-25) as called for in claim 4. An exchange biasing layer 724 is arranged between the substrate 725 and the layer system 720. Since the thickness of the ferromagnetic layers may be within a range (col. 7, lines 19-33), selection of different thicknesses for the individual layers (claims 7 and 8 would also be implicit. Magnetoresistive devices of the type disclosed by Gill are

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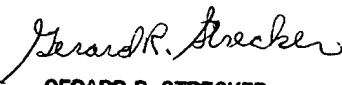
conventionally manufactured for use in data storage systems (claim 9) and as magnetic memories (claim 10).

Gill (6,275,363) and Everitt et al are made of record to show pinned layer magnetoresistive devices.

Any inquiry concerning this communication should be directed to G. R. Strecker at telephone number (703) 305-4937.

G.R. Strecker/mm

06/20/02

  
GERARD R. STRECKER  
PRIMARY EXAMINER